REMARKS

The Office Action mailed August 24, 2004 has been received and carefully noted. It is noted that the Examiner indicated in a telephone discussion on September 2, 2004 that an earlier Office Action mailed July 20, 2004 is identical to the Office Action mailed August 24, 2004 and that Applicant's statutory period for reply runs from the mailing date of the August 24, 2004 communication. The following remarks are submitted as a full and complete response thereto.

No extension of time is believed to be required based upon the filing of this Amendment prior to the deadline of the three-month statutory period (i.e., November 24, 2004). Authorization is granted to charge counsel's Deposit Account No. 01-2300, referencing **Attorney Docket No. 101201-00009**, for any additional fees necessary for entry of this Amendment.

Claims 15-17 have been added, claims 11-13 have been amended and claims 9-10 and 14 have been cancelled. Applicant submits that the amendments made herein are fully supported in the Specification and the drawings, as originally filed, and therefore no new matter has been introduced. Accordingly, claims 11-13 and 15-17 are pending in the present application and are respectfully submitted for reconsideration.

Claims 9-14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Akihiro et al. reference (JP 09-284200). Dependent claims 10-13 depend from independent claim 9. Claims 9-10 and 14 have been cancelled and dependent claims 11-13 have been amended to dependent from new substitute claim 15, thus rendering moot the rejections with respect to claims 9-14. Insofar as the rejections may be applicable to the newly submitted substitute claims

15-17 and remaining dependent claims 11-13, the rejections are accordingly respectfully traversed and reconsideration is requested.

As indicated above, claims 15-17 have been added. Dependent claims 11-13, as amended, and newly added dependent claim 16 depends from independent claim 15. Newly added independent claim 17 is the corresponding method claim to independent claim 15. Applicant respectfully submits that claims 11-13 and 15-17 are patentable and in condition for allowance. Entry of the new claims and the amendments to the claims is requested.

Newly added independent claim 15 recites a wireless base station that transmits a control signal to a non-specific mobile station by forming an omnidirectional antenna pattern and transmits a control signal to a specific mobile station by forming an array antenna pattern, the wireless base station comprising a judging unit operable to, when the control signal is to be transmitted to the specific mobile station, judge if at least one of the following is satisfied: (a) a difference between received reference signals in an immediately preceding reception from a mobile station is equal to or larger than a threshold value, and (b) a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length; and a controlling unit operable to, when the judging unit judges in the affirmative, stop the wireless base station from forming the array antenna pattern and force the wireless base station to transmit the control signal by forming an omnidirectional antenna pattern. Independent claim 17 is the corresponding method claim to independent claim 15 and is directed to a controlled method to be used by a wireless base station.

One of the features of the present invention is that a control signal for a non-specific mobile station from the base station, e.g., a signal of general information such as base station information, is always transmitted with an omnidirectional antenna pattern, whereas a control

signal for a specific mobile station, e.g., a signal of individual information such as connection channel allotment information, is normally transmitted with a directional antenna pattern. The controlling unit, however, switches to an omnidirectional antenna pattern, when the judging unit has judged that at least one of the following is satisfied: (a) a difference between received reference signals in an immediately preceding reception from a mobile station is equal to or larger than a threshold value, and (b) a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length.

Thus, according to the present invention, the control signal is transmitted from the base station to a specific mobile station normally with a directional antenna pattern, thus reducing interferences from other base stations. The controlling unit, however, stops the base station from forming the directional antenna pattern and forces the base station to transmit the control signal with an omnidirectional antenna pattern when the judging unit has judged that at least one of the aforementioned criteria is satisfied. For example, in a case where the difference between received reference signals in a reception is equal to or larger than a threshold value, the controlling unit judges that the quality of the communication is bad and makes sure that the control signal is transmitted to the mobile station by switching to an omnidirectional antenna pattern. Further, in a case where a predetermined period of time has passed since an immediately preceding reception from a mobile station, an appropriate directional pattern cannot necessarily be formed because the mobile station may be away from where it was at the time of the preceding reception. Thus, the controlling unit switches to an omnidirectional antenna pattern in order to make sure that the control signal is transmitted to the mobile station.

The Akihiro et al. reference, in pertinent part, discloses that when a base station having a plurality of antennas receives a signal from a mobile station (wireless terminal) with which the

base station is communicating, the control unit: (a) performs transmission with a directional antenna pattern (narrow beam) when the reception electric field strength from the mobile station is equal to or lower than a predetermined value or when the passing speed of the mobile station exceeds a predetermined value, and (b) performs transmission with an omnidirectional antenna pattern (omni beam) in other cases. Here, when the reception electric field strength is equal to or lower than the predetermined value, the quality of communication is deemed to be bad. When the passing speed of the mobile station exceeds a predetermined value, the mobile station may be away from where it was at the time of the preceding reception. It is respectfully submitted that the Akihiro et al. reference does not disclose or suggest the wireless base station, as claimed in the present invention.

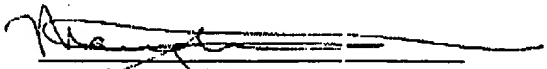
Applicant acknowledges that the present invention and the Akihiro et al. reference have in common the technical feature of a base station comprising a transmitting/receiving unit operable to form a directional antenna pattern and an omnidirectional antenna pattern, and a controlling unit operable to select an antenna pattern fro a specific mobile station according to reception from the specific mobile station. However, according to the Akihiro et al. reference, when the quality of communication is bad in reception from a mobile station, the controlling unit performs transmission to the mobile station using a directional pattern. In contrast, according to the present invention, the controlling unit uses an omnidirectional pattern. Specifically, in the present invention, switching to an omnidirectional pattern when at least one of the aforementioned criteria is satisfied makes sure that the control signal is sent to a mobile station. Accordingly, the Akihiro et al. reference does not disclose or suggest the wireless base station, as claimed.

Based upon the forgoing, Applicant respectfully submits that each and every element and step recited within independent claims 15 and 17, respectively, are neither disclosed nor suggested by the Akihiro et al. reference, and therefore patentable and in condition for allowance. It is further submitted that dependent claims 11-13 and 16 are also patentable and in condition for allowance due to their dependency upon independent claim 15, since the dependent claims differ in scope from the parent claim. Dependent claims 11-13 and 16 depend from independent claim 15, and thus are further limited to additional features of the invention. Therefore, it is respectfully submitted that the dependent claims are patentable over the Akihiro et al. reference for at least the reasons set forth above with respect to independent claim 15. Reconsideration of the present application is requested.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicant's undersigned counsel at the telephone number, indicated below, to arrange for an interview to expedite the disposition of this application.

Dated: October 13, 2004

Respectfully submitted,



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